Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

**Unit 7, Part 2 (More Complex Patterns of Inheritance) – Learning Targets**

Pre-AP Biology, Mrs. Krouse

**What will I be able to do when I’ve finished this lesson?**

1. I can analyze the results of a test cross
2. I can explain what a test cross is and why it is used.
3. I can identify the genotype of the dominant parent based on offspring phenotype frequencies.
4. I can use Punnett squares for traits that show incomplete dominance.

A. I can define incomplete dominance.

B. Given information about a trait, I can identify it as an example of incomplete dominance.

C. I can identify the genotypes of the parents in a Punnett square word problem about a trait that shows incomplete dominance.

D. I can set up a Punnett square using the genotypes from “C.”

E. I can fill in the offspring genotypes in the boxes of the Punnett square I set up in “D.”

F. I can identify genotype and phenotype frequencies in the offspring by analyzing the Punnett square I completed in “E.” I must be able to express these frequencies as fractions, percentages, or ratios.

1. I can use Punnett squares for traits that show codominance.

*Same learning targets as A-F in #2 but for codominance.*

1. I can use Punnett squares for traits controlled by multiple alleles.

A. I can define “multiple alleles.”

B. I can explain how the A, B, and O blood type alleles interact with each other and predict phenotypes (blood types) based on genotypes (Ex: AO).

*Same learning targets as C-F in #2 but for blood types.*